



(12) **EUROPEAN PATENT APPLICATION**

(88) Date of publication A3:
02.04.2014 Bulletin 2014/14

(51) Int Cl.:
H04B 7/15 (2006.01) H04L 1/06 (2006.01)

(43) Date of publication A2:
01.12.2010 Bulletin 2010/48

(21) Application number: **10162824.6**

(22) Date of filing: **14.05.2010**

(84) Designated Contracting States:
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO SE SI SK SM TR
Designated Extension States:
BA ME RS

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(30) Priority: **27.05.2009 JP 2009127431**

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(54) **Wireless relay device and wireless relay method**

(57) A device and a process which enable use of transmission diversity in transmission to a receiving station when wirelessly relaying wireless signals from a transmitting station to the receiving station. A reception antenna RA in a wireless relay device (RS) receives from the transmitting station such as a base station (BS) a

signal in which data signals are respectively allocated to carriers at adjacent radio frequencies. The wireless relay device performs space frequency block coding (SFBC) of the received signal. Then, the wireless relay device transmits SFBC-encoded signals through two transmission antennas SA0 and SA1 to the receiving station such as a mobile station (MS).

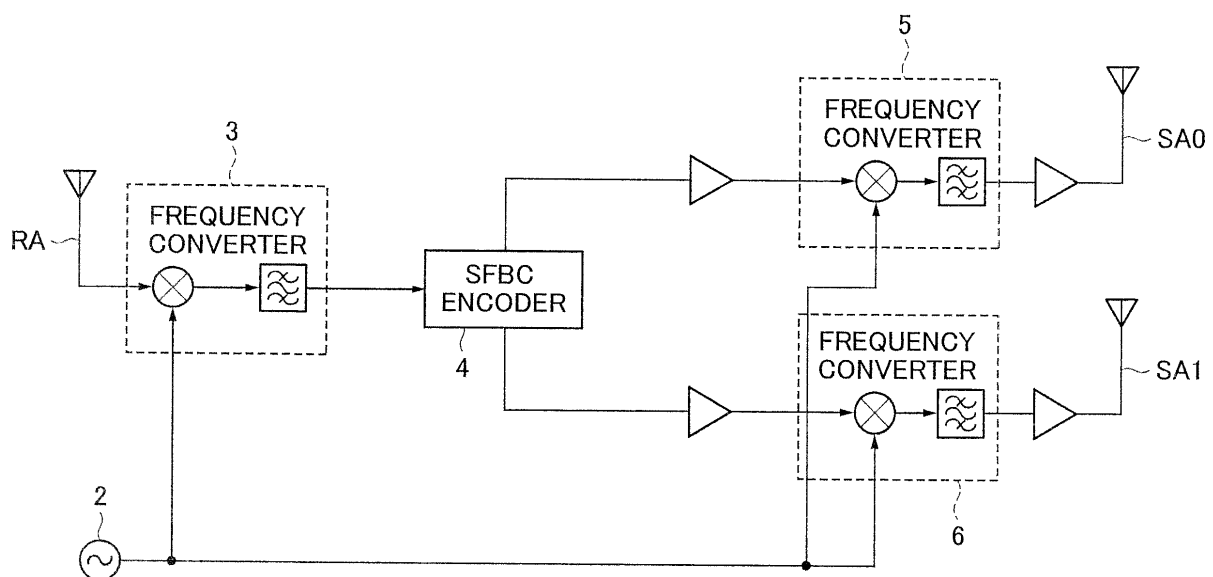


FIG.3



EUROPEAN SEARCH REPORT

Application Number
EP 10 16 2824

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The present search report has been drawn up for all claims			
Place of search Munich		Date of completion of the search 20 February 2014	Examiner Staeger, Rainer
CATEGORY OF CITED DOCUMENTS X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document			

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EPO FORM 1503 03.02 (P04C01)

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